



Social determinants of domestic violence against suburban women in developing countries: a systematic review

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Objective

In addition to the many social, economic, cultural, security, and environmental problems in the metropolitan areas, suburbanization has led to the growth and spread of domestic violence against women, and is still increasing. Different social determinants can play a role in violence against suburban women, so this study was designed to investigate the social determinants of domestic violence in suburban women of developing countries.

Methods

According to PRISMA guideline, the keywords, which were determined considering MESH, were searched in Google Scholar, MEDLINE, SID, Web of Science, Pubmed, Scopus and Science Direct with the 2009 to 2019 time limit. STROBE checklist was used for evaluating quantitative studies and JBI for qualitative studies. Finally 30 high quality studies were included.

Results

The prevalence of general domestic violence among women of different ages was reported between 2.3-73.78% in the suburban regions of developing countries. The prevalence of physical, emotional and psychological violence was about 11.54-61.6% and 7.8-84.3%. The prevalence of sexual, economic and the verbal violence was about 0.8-58.8%, 13.7- 43.7% and 33.21-86.1%. The most common factors affecting violence against women were the structural factors of early marriage, the husband's addiction to alcohol and drugs.

Conclusion

General domestic violence and its various types are prevalent in different parts of the world and the factors affecting domestic violence such as age, marriage age, low literacy, husband addiction to alcohol and drugs are all things that can be prevented by special health planning in these areas to improve women's health and thus prevent violence against suburban women.

Keywords: Domestic violence; Suburbanization; Social determinants; Women

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Introduction

Suburbanization is a part of urban development involving the low-income, the poor, and those living in rural areas without planning, control, or adherence to urban planning rules and regulations [1]. Suburbanization is a social phenomenon that has consequences such as poverty, crime, exploitation of child labor, the weakening of the middle class, and domestic violence. Suburbanization can be regarded as a major disaster that entails thousands of injuries and crises. Serious social damage occurs more in suburban areas than anywhere else, including domestic violence against women and children. The World Health Organization (WHO) defines violence as the use of mental or physical force to force, threaten, or harm another person, group, or community that causes physical or psychological harm, deprivation, or death [2]. Domestic violence against women includes any physical, sexual, or emotional abuse imposed on women in family relationships [3]. Domestic violence is recognized as the most common type of gender-based violence and is a particular social and health concern [4].

Violence against women is purely cultural. Despite initiatives by national and international organizations, violence against women is on the rise worldwide [5]. In response to the lack of comparable data on the prevalence and impact of violence against women, the WHO, in collaboration with international and local partners, conducted a large study in 10 countries using representative samples from 15 studies (one rural or urban study in most countries) among 24,000 women. The results of a multi-country study on women's health and domestic violence against women showed that between 15–71% of women aged 15–49 in a relationship experienced physical or sexual violence by a partner during their lifetime. Most studies reported an average prevalence of violence between 30–60% [6]. Other studies found that women with a history of physical or sexual violence had significantly higher health problems, greater pain, poorer health, greater anxiety, and higher suicidal thoughts than women who had not experienced violence [7]. A recent comprehensive review by the WHO acknowledged that the global prevalence of physical or sexual violence by a sexual partner is 30% among all women. The highest prevalence is in Africa, the Eastern Mediterranean, and Southeast and Eastern Asia, where approximately 37% of women experience partner violence (based on a total of 185 studies from

86 countries and data from 155 studies in 81 countries has provided estimates) [8]. The results of various studies indicate that the following social determinants and factors are independently associated with domestic violence: low age of women, length of marriage, higher education in women, husbands' low education, working spouses, military occupation, fewer children, multiple spouses, smoking spouses, aggressive spouses, chronic illness in women or their spouse, and inadequate family income [9]. According to the WHO model, the social determinants of health are socio-economic structural factors such as income, education, employment, social class, gender, race, and ethnicity; intermediate factors such as living conditions; behavioral and biological factors such as physical activity, alcohol and tobacco use; and health-related factors [10].

Is there a solution to this problem? Policies and programs based on gender empowerment analysis, attitudes, and norms that reject violence and promote gender equality as well as coordinated efforts to promote women's activism for a non-violent life are essential principles of sustainable investment in preventing violence against women [11]. In addition to the many social, economic, cultural, security, and environmental problems in metropolitan areas, suburbanization has caused the rise and spread of domestic violence against women and continues to increase. Since there has been no research on the social determinants of domestic violence in suburban women despite a considerable amount of domestic violence against suburban women, the current study aimed to investigate the social determinants of domestic violence in suburban women and suggest measures to eliminate its contributing factors so as to help this segment of society.

Criteria for considering studies for this review

1. Search strategy

This study was reported based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Web of Science, MEDLINE, SID, Google Scholar, PubMed, Scopus, Science Direct, Embase were searched. Keywords were selected using the MeSH keyboard, and the time interval of 2009–2019 was used when searching these databases (Table 1).

2. Inclusion and exclusion criteria

Inclusion criteria include all English and Persian studies published between 2009 and 2019 that were found in databases based on MeSH keywords; and studies that, in addition to expressing the prevalence of general domestic violence or types of domestic violence, also addressed relevant social factors related to domestic violence, all in suburban areas, with married or single girls and women of different ages attending the study voluntarily.

Exclusion criteria included articles in languages other than Persian and English languages, case reports, comments, letters; studies focusing solely on the social factors related to domestic violence without addressing their prevalence; women who were aware of their rights and domestic violence, and women who did not want to cooperate.

3. Study selection

The initial search yielded 733 results. The eligibility of these papers was independently evaluated by two authors and any disagreements were resolved by consensus. In the first stage, 400 papers were excluded due to being irrelevant or duplicated. After reviewing the titles and abstracts of the remaining papers, 177 more papers were excluded. In the evaluation of the full texts, 42 out of the remaining 99 articles were excluded due to being ineligible. Finally, a total of 30 eligible articles were reviewed (Fig. 1).

4. Quality assessment

The STROBE statements were applied to evaluate the quality of studies. The checklist items focus on reporting how the trial was designed, analyzed, and interpreted. The STROBE Statement, an authoritative tool, consists of a 22-item check-

Table 1. Search strategy

ID	Search term
#1	"Domestic Violence"[tiab] OR "Family Violence"[tiab] OR "Spousal Violence"[tiab] OR "Sexual Violence"[tiab] OR "Physical Violence"[tiab] OR "Emotional Violence"[tiab] OR "Verbal Violence"[tiab], OR "Economical Violence"[tiab], OR "Assaultive Behavior"[tiab]
#2	'suburban area' [tiab], OR 'suburbanization' [tiab], OR 'Social marginalization' [tiab] OR 'slum' [tiab], OR 'informal settlement' [tiab], OR 'marginalization' [taib], OR 'Poverty Area' [tiab],
#3	'woman' [tiab], OR " women" [tiab], OR "female" [tiab]
#1 AND #2 AND #3	

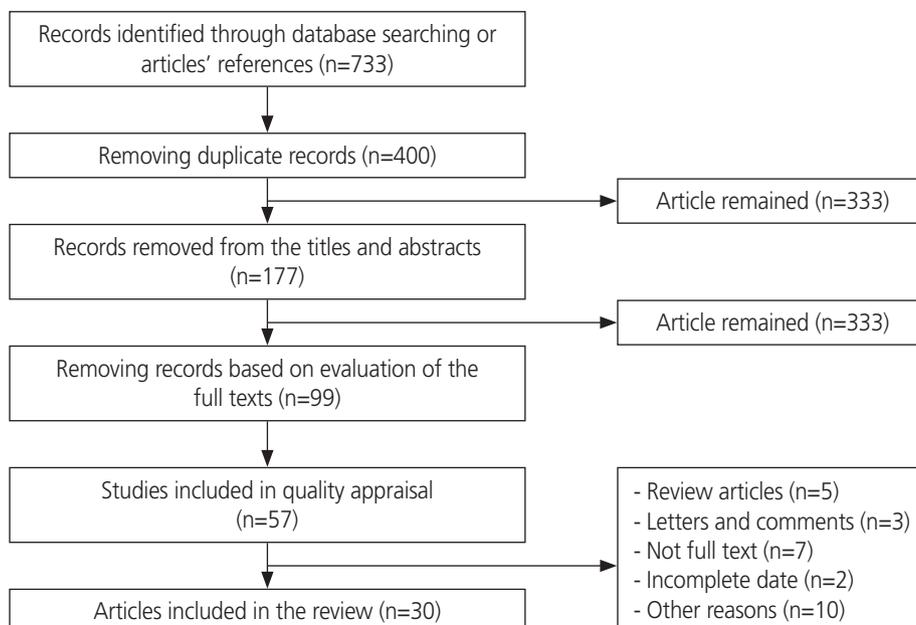


Fig. 1. Search flow diagram.

list. The checklist items focus on reporting or evaluating different sections of observational studies [12,13]. The JBI checklist was used for qualitative studies.

5. Data extraction

Two authors independently performed the study selection and validity assessment and resolved any disagreements by consulting a third researcher. The first author name, publication year, study design, sample size, study region, age, social determinants of domestic violence, total prevalence of domestic violence, physical violence, emotional violence, sexual violence, economical violence, verbal violence, and quality score were extracted and entered into the analysis.

Results

After evaluation, 30 articles were selected as eligible. The types of articles were qualitative (n=3), quantitative (n=26), and mixed method (n=1). A total of 18,723 women living in the suburbs and in different age groups (13 years and older) participated in the study. The frequency of countries in which the articles were conducted is as follows: India (n=17), Bangladesh (n=4), Nigeria (n=2), Nepal (n=2), Uganda (n=1), Iran (n=1), South Africa (n=1), Pakistan (n=1), and Kenya (n=1).

1. Prevalence of domestic violence in suburbs

Domestic violence was perpetrated by various individuals, such as the husband, the spouse's family, (especially the mother-in-law), other members of the wife's family, and relatives. The most common perpetrator was identified as the husband. Of the 30 studies, 23 cases (Table 2) reported that the prevalence of general domestic violence among women of different ages ranged from 2.3–73.78% in suburban regions of different countries. The lowest and highest prevalence were in India and Bangladesh, respectively.

Twenty studies also reported the prevalence of physical violence as 11.54–61.6%. The different types of physical violence that were dealt with in the studies included slapping, pushing, beating, hitting, kicking, firing, pulling, twisting the hand, and throwing. Fourteen studies reported the prevalence of emotional and psychological violence as between 7.8–84.3%.

The different types that the studies addressed included fear of the spouse, verbal disputes, the use of derogatory rhetoric,

intimidation, lack of meeting basic needs, and insults.

Thirteen studies reported the prevalence of sexual violence as approximately 0.8–58.8%. In addition, there were questions about forced sexual relations of any kind.

Three studies reported economic violence with a prevalence ranging from 13.7–43.7%. Moreover, there were cases where the wife's financial needs were not being met by the husband.

Four studies also exclusively focused on verbal violence, with a prevalence of 33.21–86.1%. Verbal violence also included humiliating a person alone or in front of others, threats of divorce, doubting, using abusive rhetoric to address the woman, asking for a dowry, and insulting the woman's personality.

2. Social determinants of domestic violence in the suburbs

Of the 30 studies, 28 reported factors that cause domestic violence against women (Table 3). According to the WHO model, factors related to domestic violence can be divided into structural and socio-economic factors including education, employment, economic status, social class, gender, race, culture; intermediate factors including living conditions, psychological conditions, and social conditions; behavioral factors; and factors related to the health system.

3. Structural factors

These factors include low age at marriage (8 studies), low literacy or illiteracy of woman (7 studies), not doing household chores properly (5 studies), financial issues and low socio-economic status (5 studies), gender inequalities and patriarchal gender norms (5 studies), not cooking properly or not cooking according to the husband's desire (4 studies), dowry issues such as dowry demand or low dowry (4 studies), not being able to bear a male child (4 studies), low level of spouse literacy (3 studies), poverty (3 studies), working women and earning an income (3 studies), leaving the household on any pretext without prior permission from husband (3 studies), duration of marriage 5 years and more (3 studies), women belonging to families with low per capita income (2 studies), extra-marital relations by woman (2 studies), unemployed women (2 studies), number of children and neglecting the children according to the spouse (2 studies), neglect of children (2 studies), justifying wife beating (2 studies), instigation by mother-in-law (2 studies), affairs related

Table 2. Prevalence of domestic violence in suburban women

Author (yr)	Ref.	Study design	Sample size	Region	Age (yr)	Total prevalence of domestic violence (%)	Physical (%)	Emotional (%)	Sexual (%)	Economical (%)	Verbal (%)	Quality score
Dasgupta et al. (2019)	[14]	Cross-sectional	1,047	India	17-45	29.4	-	-	-	-	-	21
Gibbs et al. (2018)	[15]	Cross-sectional	680	South African	18-30	-	48.5	66.5	21.2	43.7	-	21
Chowdhury et al. (2018)	[16]	Cross-sectional	87	Bangladesh	15-49	57.5	-	-	-	-	-	21
Pal et al. (2017)	[17]	Cross-sectional	50	India	15-49	59.3	61.6	84.3	58.8	-	-	19
Mohapatra and Mistry (2017)	[18]	Cross-sectional	100	India	15-49	35	34	35	17	-	-	19
Khayat et al. (2017)	[19]	Cross-sectional	400	Iran	15-49	-	18	-	39	-	-	20
Silverman et al. (2016)	[20]	Cross-sectional	1,061	India	17-45	28.4	-	-	-	-	-	18
Sathe and Holcombe (2016)	[21]	Cross-sectional	115	India	15-45	55.83	28.16	49.03	-	-	-	17
Parvin et al. (2016)	[22]	Cross-sectional	1,566	Bangladesh	15-29	60	-	-	-	-	-	21
Muthengi et al. (2016)	[23]	Cross-sectional	452	Kenya	15-19	25.6	-	-	-	-	-	20
Donta et al. (2016)	[24]	Cross-sectional	1,136	India	18-39	21	16.8	12.4	4.8	-	-	19
Swahn et al. (2015)	[25]	Cross-sectional	313	Uganda	14-24	-	36.9	-	-	-	-	17
Dasgupta et al. (2015)	[26]	Cross sectional	97	India	15-49	32.9	-	-	-	-	-	21
Begum et al. (2015)	[27]	Cross sectional	1,137	India	18-39	21.2	16.8	12.4	4.8	-	-	20
Barman et al. (2015)	[28]	Cross sectional	300	India	15-19	2.3	-	-	-	-	-	17
Hiremath and Debaje (2014)	[29]	Cross sectional	59	India	15-19	38.15	-	-	-	-	-	17
Gaikwad and Rao (2014)	[30]	Cross sectional	548	India	15-45	36.86	26.82	12.59	24.64	-	33.21	18
Shrivastava and Shrivastava (2013)	[31]	Cross sectional	274	India	18-45	36.9	53.4	-	-	-	86.1	18
Kambli et al. (2013)	[32]	Cross sectional	105	India	15-45	100	48.57	-	-	-	71.4	17
Fawole et al. (2013)	[33]	Cross sectional	323	Nigeria	18≤	-	16.7	20.8	0.8	13.7	-	20
Das et al. (2013)	[34]	Cross sectional	2,139	India		14.9	11.54	7.8	1.63	-	-	21
Sinha et al. (2012)	[35]	Cross sectional	159	India	15-45	54	41.9	19.8	-	-	-	17
Sambisa et al. (2011)	[36]	Cross sectional	5,128	Bangladesh	15-49	35	-	-	-	-	-	19
Bhatta et al. (2018)	[37]	Cross sectional	120	Nepal	18≤	42.5	35.3	27.4	-	-	-	21
Pandey et al. (2009)	[38]	Cross sectional	751	India	15-45	17.6	-	-	-	-	-	17
Awusi et al. (2009)	[39]	Cross sectional	400	Nigeria	15-43	36	31	-	11	-	58	17
Islam and Dey (2013)	[40]	Mixed method	87	Bangladesh	14-40	73.78	71.12	42.22	4.44	24.45	-	18
Deuba et al. (2016)	[41]	Qualitative	20	Nepal	23-24	-	100	60	30	-	-	19
Nasrullah et al. (2015)	[42]	Qualitative	19	Pakistan	21-34	-	89.5	68.4	42.1	-	-	19
Ghosh (2015)	[43]	Qualitative	52	India	20-46	-	53.8	-	-	-	-	16

Table 3. Social determinants of domestic violence in women living in slum

Author (yr)	Ref.	Study region	Social determinants of domestic violence
Dasgupta et al. (2019)	[14]	India	Not reported
Gibbs et al. (2018)	[15]	South African	Not reported
Chowdhury et al. (2018)	[16]	Bangladesh	Age at marriage, number of family members, wealth index
Pal et al. (2017)	[17]	India	Women belonging to families with low per capita income, low educational background of husband, not able to bear a male child, unemployment amongst both the spouses, leave the household on any pretext without prior permission from husband, wives did not attend household activities properly
Mohapatra and Mistry (2017)	[18]	India	Alcohol addiction, illiteracy of husband, dowry related problem, not having a male child, not cooking properly, talking with neighbors
Khayat et al. (2017)	[19]	Iran	Fear about destroying the relationship
Silverman et al. (2016)	[20]	India	Gender inequity (nutritional deprivation, deprivation of sleep, blocking access to health care during pregnancy)
Sathe and Holcombe (2016)	[21]	India	Not cooking properly, not attending to households, not having a male child, dowry related problem, alcoholic addiction of husbands
Parvin et al. (2016)	[22]	Bangladesh	Injured needed health care, verbal dispute, perceived disobedience of the woman, without any particular reason
Muthengi et al. (2016)	[23]	Kenya	Patriarchal gender norms, poverty, female employment, financial conflicts
Donta et al. (2016)	[24]	India	Not empowered women in decision making, justifying wife beating
Swahn et al. (2015)	[25]	Uganda	Self-monitoring at night, hunger, drunkenness, sadness
Dasgupta et al. (2015)	[26]	India	Alcohol abuse by the spouse, level of education of the spouse, per capita income and occupation of the women, argument with the spouse, spouse disliking the cooked food, neglecting the children according to the spouse, talking to unrelated male
Begum et al. (2015)	[27]	India	Husband consumed alcohol, women who justified wife beating, married before attaining 18 years, illiterate women, marital duration was more than 5 years, women belonging to SC/ST, working, having more than one child
Barman et al. (2015)	[28]	India	Low socio-economic status (financial hardship), infidelity
Hiremath and Debaje (2014)	[29]	India	Younger age, increases depression score, maladaptive behaviour in the adolescent population
Gaikwad and Rao (2014)	[30]	India	Age, illiterate, lower socio-economic status, -unemployed (less than 18), duration of marriage (5–10 years), education of husband (illiterate), type of family (nuclear)
Shrivastava and Shrivastava (2013)	[31]	India	Age, education, spousal alcoholism, duration of marriage
Kambli et al. (2013)	[32]	India	Age group 26–35 years, illiterate
Fawole et al. (2013)	[33]	Nigeria	Lower knowledge levels, low egalitarian attitudes
Das et al. (2013)	[34]	India	Justifiable if a woman disrespected her in-laws, argued with her husband, failed to provide good food, housework and childcare, went out without permission
Sinha et al. (2012)	[35]	India	Alcohol addiction, multiple sex partners
Sambisa et al. (2011)	[36]	Bangladesh	Age (19 years or less), illiterate, poor household wealth, number of children
Bhatta et al. (2018)	[37]	Nepal	Substance abuse, lack of economic stability, doing things that inlaws don't like, not doing household chores properly, going out without permission, talking to male friends, refusal of sex, extramarital affair of husband, lack of legal implication

Table 3. Continued

Author (yr)	Ref.	Study region	Social determinants of domestic violence
Pandey et al. (2009)	[38]	India	Level of education, unemployment, low family income per month, alcohol and other psychotropic substances, extramarital relations, frequenting red light districts
Awusi et al. (2009)	[39]	Nigeria	Age (26–30)
Islam and Dey (2013)	[40]	Bangladesh	No income, illiterate, dowry demand, extra marital relationship of husband, marital conflict/inconsistency, financial insolvency, drug addiction of husbands, unknown reasons
Deuba et al. (2016)	[41]	Nepal	Refused to have sex, gave birth to a girl, alcohol use disorder
Nasrullah et al. (2015)	[42]	Pakistan	Family affairs particularly issues with in-laws, instigation of mother in law, poor house management, bringing insufficient dowry, infertility, unwanted sex
Ghosh (2015)	[43]	India	Poor women

SC/ST, scheduled caste/scheduled tribe.

to the husband's family and doing things disfavored by the in-laws (2 studies), number of family members, husband's unemployment, talking to neighbors, fear of losing relationships, not empowering women in decision-making, talking to unrelated males, and family type (nucleus).

4. Intermediate factors

The frequencies of these factors included husband's addiction to alcohol and drugs (11 studies), verbal disputes and conflict with husband (4 studies), refusal of sex (3 studies), depression (2 studies), perceived disobedience, infertility, multiple sex partners, maladaptive behaviors in adolescent girls, physical trauma, disability, and inadequate household health.

5. Health-system-related factors

One study noted women's lack of legal protections. Two studies also reported domestic violence without a reason.

Discussion

Domestic violence is a major health problem throughout the world that, although not yet well recognized, is still associated with uncertainty and many taboos for women and can impact every woman regardless of her age, culture, and socio-economic status [44]. In this systematic study, 30 articles on domestic violence and related social determinants were studied based on the WHO model. Among domestic violence types, physical violence was the most prevalent in 20 cases,

emotional violence in 14 cases, and physical violence in 12 cases. Alhabib et al. [45] in a meta-analysis study stated that violence against women has reached epidemic proportions in many societies, and it appears that all ethnicities, nationalities, or socio-economic groups are affected by this phenomenon. This finding is consistent with the study by Zakar et al. [46], who found that the highest prevalence of reported violence is related to emotional violence. A study conducted by Dolatian et al. [47] in one Iranian city found that rates of emotional violence are higher than those of physical violence: 81.2% and 40.4%, respectively, but a study conducted by Sheikhan et al. [48] found that physical violence was 34.7% more prevalent than emotional and sexual violence. The results of a national study by Spanish researchers surveying 26,042 women who suffered violence in 2006 also found the prevalence of sexual, psychological, and physical violence against women to be 7%, 18.5%, and 18.8%, respectively [49].

In their study, Brazilian researchers reported the prevalence of physical, psychological, and sexual violence as 41.8%, 33.7%, and 14.3%, respectively, which is consistent with recent findings [50], but some studies attributed the difference between prevalence of physical violence with emotional and verbal violence to the greater salience of physical violence than emotional violence, the existence of respective legislation, and the reluctance of some women to speak about physical violence for various reasons, such as taboos [51].

Various studies have identified several factors associated with domestic violence. In a recent study based on the WHO model, among structural determinants, economic, social,

educational level and gender inequalities showed the highest correlation with violence. Education of the spouse and women is cited as a protective factor against violence. The higher the education of the spouse, the better his behavior with the woman due to his understanding of social and family duties, which reduces violence. The education level of women at the individual level has a strong association with violence, partly due to living standards, although today for a number of reasons, including the acceptance of mistreatment of women at the social level, the protective effect of education has been somewhat reduced [52]. Education level can also contribute to improving socio-economic status through its role in assisting in finding the right job, thereby reducing the violence that occurs because of the inappropriate status of this factor [10]. Recent findings are in line with the findings of Moafi et al. [53], who also found that structural factors such as socio-economic status, education, social class, and gender are related to the prevalence of violence. In addition, they found that women's education and employment were inversely related to domestic violence. Similar to the results of the present study, Fallah et al. [54] reported education, employment, age of marriage, and income as the most relevant factors among the structural factors related to domestic violence. Inappropriate income and spouse's unemployment leads to more presence of men at home and marital conflicts due to financial problems and subsequent psychological impacts. Conversely, having a job, financial independence, and optimal economic status are protective factors against types of violence [55].

Among the intermediate determinants examined in the articles, inappropriate health behaviors such as alcohol and drug abuse, sexual dissatisfaction, inappropriate environmental conditions, and mental disorders showed the highest associations with domestic violence. A study conducted by Castro et al. [56] found that the most important predictor of domestic violence was alcohol use. Other studies have confirmed findings consistent with the results of the current study, and it seems that this factor, as a situational variable, exacerbates conflicts between couples [57,58]. While drug and alcohol use by women might be a negative adaptation to violence and its resulting stress, it can also anger the husband and exacerbate the violence [59]. In a study conducted by Moafi et al. [53] alcohol use was associated with domestic violence, although its use by woman was unrelated.

Another intermediate factor was sexual dissatisfaction:

Hastuti et al. [60] found that women who had sexual dysfunction followed by sexual dissatisfaction were 4 times more likely than other women to experience domestic violence. Ulloa and Hammett [61] reported a correlation between an increase in the proportion of domestic violence and sexual dissatisfaction. They stated that the lower the level of sexual satisfaction, the higher the probability of domestic violence. According to Babaie [62], when there is disagreement or difference between spouses, conflicts were arise. Without satisfactory sex, the stability of marital relationships is endangered; thus, researchers believe that marital satisfaction is always subject to sexual satisfaction [63].

In the WHO model, the health system determinant is observed both separately and alongside structural determinants. In the present study, one study points to the lack of legal implications for women by respective organizations and the incidence of domestic violence. The highest frequency of violence against women occurs in the family environment and through their marital partner. Some countries have helped the judiciary to decide on men who commit domestic violence against their spouses. This has led to changes in laws in some countries in line with international guidelines to better protect women against domestic violence [64-67].

Innovative and novel interventions and policies are now available around the world to reduce violence against women. However, an integrated and coherent approach is still needed to bring together all national and international non-governmental organizations to achieve sustainable social change.

Given the wide range of perpetrators of domestic violence against suburban women, it can be stated that domestic violence is almost always widespread in developing countries, and the factors affecting it can be prevented by health planning and raising awareness in these areas. The health systems of these countries should pay special attention to health planning of women as the family foundation in the suburbs and promote their physical and mental health with particular attention to protection of vulnerable women and preventing violence against women. The social, cultural, and religious taboos in the suburbs against expression of violence against women in these areas as well as various cultural and religious factors in different parts of the world offer a different range of domestic violence that make it difficult to judge.

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Conflict of interest

No potential conflict of interest relevant to this article was reported.

Ethical approval

This study was approved by the Social Determinants Research Center of Alborz University of Medical Sciences with ethical code IR.ABZUMS.REC.1398.194.

Patient consent

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